

REPLACEMENT SHEET 1 OF 5

MAP OF PLASMID pHH21 NP UTR luciferase

FEATURES	
nt 3-25	3' UTR NP
nt 26-1678	Luciferase
nt 1679-1723	5' UTR NP
nt 1724-1865	pol I terminator
nt 3859-2	pol I promoter

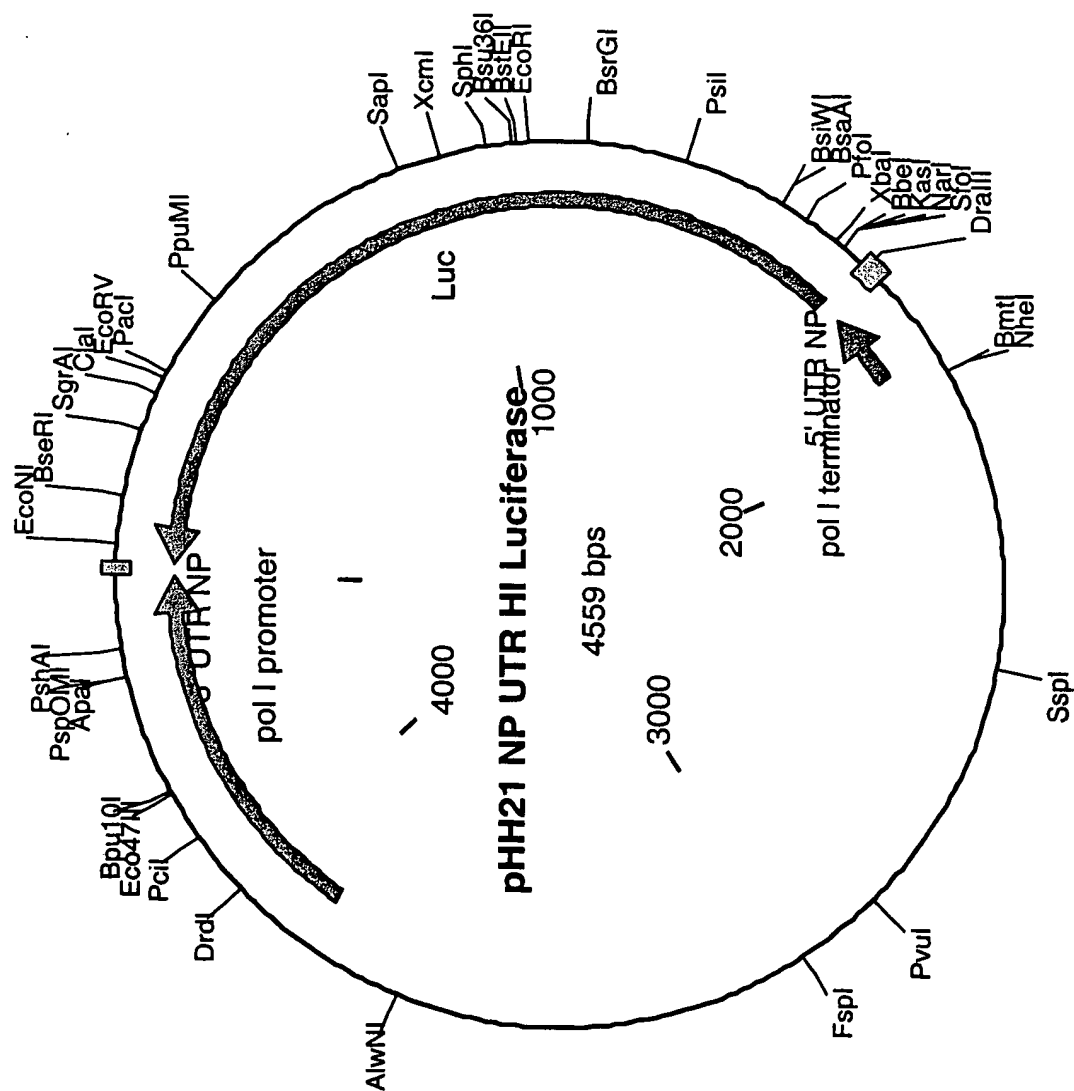


FIG. 1



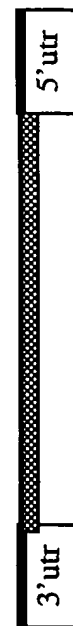
TRANSCRIPTION, REPLICATION AND TRANSLATION OF A SEGMENTED NEGATIVE STRAND VIRUS ARTIFICIAL SEGMENT



pHH21 NP UTR HI Luciferase



Transfect cells
with plasmid

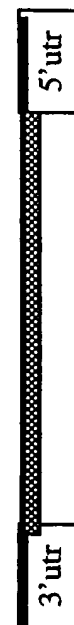


Host cell RNA polymerase I enzyme transcribes a
negative polarity RNA molecule

Infect with virus-
containing sample or
introduce viral
polymerase components



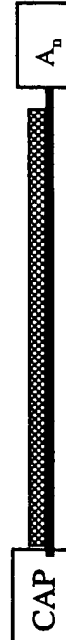
+



Viral polymerase replicates the +
polarity RNA into - polarity RNA

replication

OR



+

Reporter protein

Viral polymerase recognizes the
reporter gene containing RNA,
replicates it into a positive polarity
RNA molecule and transcribes it into
an mRNA

translation

FIG. 2



METHOD FOR DETECTING VIRUSES USING VIRAL POLYMERASE RESPONSIVE REPORTER GENES

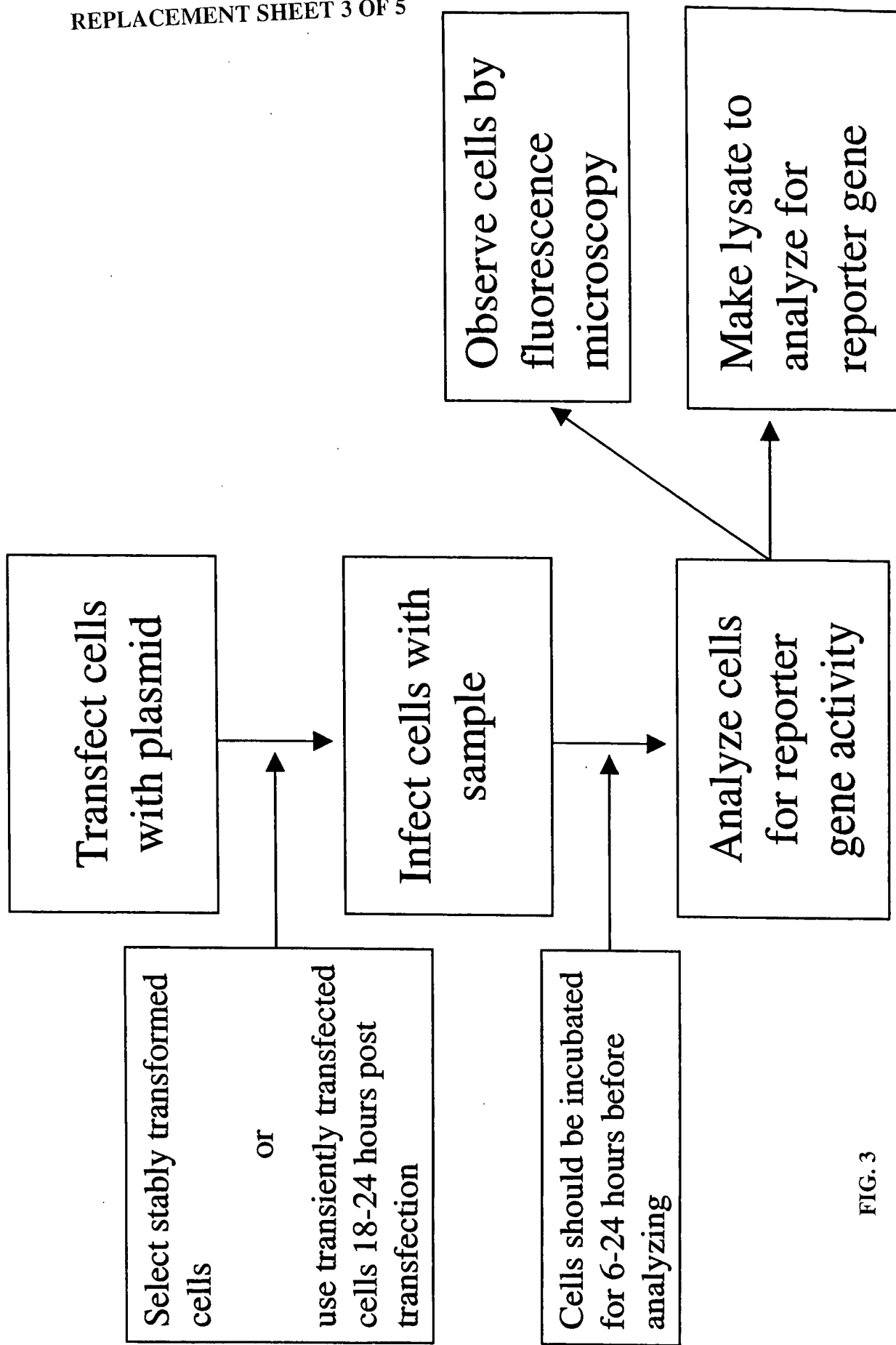


FIG. 3



Luciferase reporter gene assay

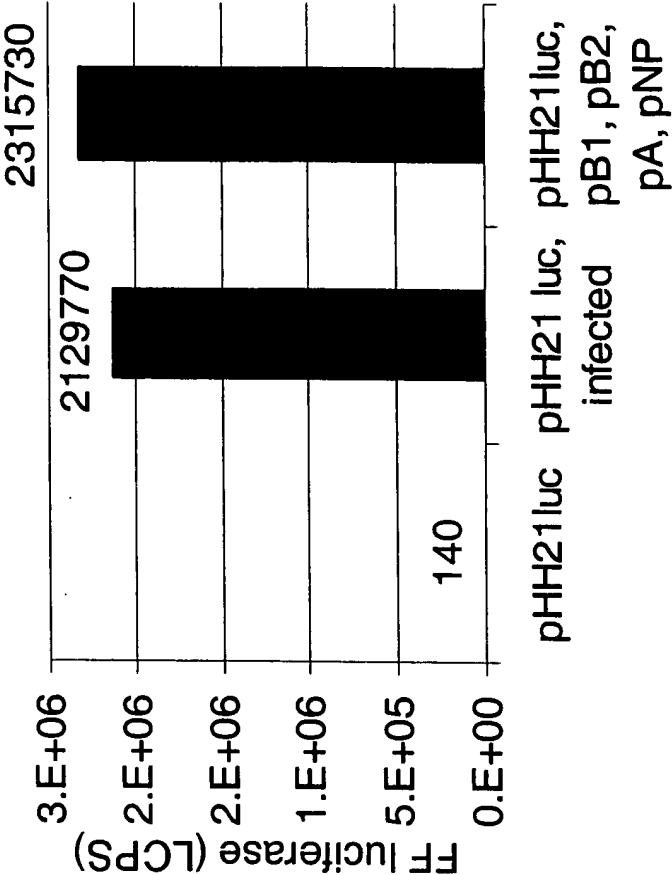


FIG. 4



App. No. 10/700, 239; Filed: 11/3/2003

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GFP reporter gene assay

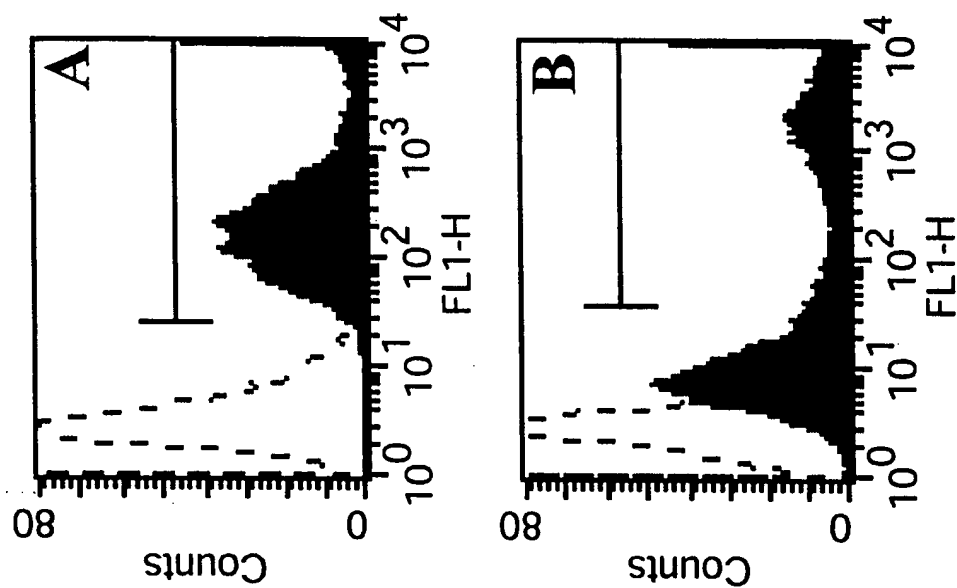


FIG. 5